

## **Draft Floodplain Recommendations for New Growth Areas**

### ***WORK-IN-PROGRESS February 3, 2003***

*The draft/work-in-progress floodplain standards recommendations for New Growth areas below were developed following polling and discussion amongst the floodplain task force members at their January 7, 2003 meeting. The draft is an effort to reflect the majority voice of the Task Force members who provided input. However, where direction from the Task Force was unclear, or when further clarification or additional information was thought to bear on a particular recommendation area, staff input is reflected in the recommendations as well. This draft/work-in-progress is for the purposes of discussion at the February 4, 2003 Floodplain Task Force meeting.*

1. No Adverse Impact. In new growth areas, the City of Lincoln should have a policy of No Adverse Impact, with a goal of ensuring that the action of one property owner does not adversely impact the flooding risk for other properties, as measured by increased flood stages, flood velocity, flows, or the increased potential for erosion and sedimentation.
2. No Net Rise/Compensatory Storage Standard. A No Net Rise and Compensatory Storage standard should be adopted. This means that development within the 100-year floodplain in new growth areas should be required to demonstrate through an engineering study that it will cause no increase in the water surface elevation of the 100-year flood. In addition, compensatory storage should be required at a ratio of 1.5 to 1 for volume of flood storage lost to fill or structures in the 100-year floodplain (*See Appendix A for additional information; also, see Item 11 for discussion of this standard as it relates to substantial improvements*).
3. Stream Crossing Structures. The City should adopt a practical standard for

4. Stream Buffers. The Minimum Flood Corridor stream buffer or similar standard should be applied within the FEMA-mapped floodplains and along smaller, unmapped streams that have a defined bed and bank. Encroachments should be permitted per the existing standards for Minimum Flood Corridors for operation, maintenance and repair, channel stabilization, stormwater storage facilities, utility crossings, public parks, pedestrian/bike trails and other recreational uses and public purposes. However, proposed encroachments should be required to demonstrate a sequencing approach that seeks first to avoid, then to minimize, then mitigate for any encroachments. Mitigation for loss of vegetation and flood storage should occur at a 2 to 1 ratio. Where land uses prior to development have impacted the buffer width, the area should be replanted with vegetation compatible with the corridor and water quality benefits.

5. Surplus/Vacated Floodplain Property Policy.  
When City-owned ROW in the floodplain is vacated, or when City property in the floodplain is proposed for surplus, the City should retain a permanent conservation easement that protects the flood storage capacity. Consideration should be given to allowing for a conservation easement to be deeded over an alternate floodplain area having equal flood storage volume where appropriate. Where floodplains contain environmental resources such as riparian areas or stream corridors that provide habitat and water infiltration benefits or serve as connectors to natural areas, these resources should be preserved and alternate storage locations should not be an option.

When other publicly-owned property in the floodplain is proposed for surplus, the City should consider purchasing the property fee simple, or alternatively, purchasing a permanent conservation easement where appropriate to preserve flood storage and other environmental resources.

7. Floodplain Development Fee. The City should consider charging a floodplain development fee. However, further evaluation needs to be completed regarding alternative fee structures and criteria for applying the fees before a decision is made regarding the advancement of this concept. If a fee is established in the future, the revenue should be dedicated to advance the flood mapping program and to assist in the funding of floodplain buyouts.
8. Best Management Practices. 'Best Management Practices' such as grassed swales, water quality wetlands, retention cells, etc. are recommended and should be encouraged in floodplain areas. Best Management Practices are identified in the City of Lincoln Drainage Criteria Manual and can offset impacts to the natural and beneficial functions of floodplains when they are developed. *(See Appendix C for additional information).*
9. Salt Creek Flood Storage Areas. *(N/A for New Growth Areas).*
10. Building Construction Standards. Buildings in new growth areas should be protected to an elevation 1.5 feet above the 100-year flood elevation.
11. Substantial Improvement Threshold. Where there are existing residential, commercial, or industrial structures within the floodplain, the substantial improvement threshold should continue to be implemented the same way that it is today (which reflects the minimum federal requirements). That is, when an improvement is made to a structure that is equal to or greater than 50% of its value, the entire structure must be brought into compliance with the floodplain regulations. Each separate improvement is considered individually relative to the 50% threshold.

In lieu of a new policy to cumulatively track substantial improvements, the City should implement a standard requiring *a//* lateral additions to non-residential structures to be elevated or protected to 1.5' above the base

also be met when a substantial improvement ( $\geq 50\%$  of the value) is made to a structure, or when a lateral addition is made to a non-residential structure.

11. Cluster Development.

Additional incentives should be adopted for clustering development outside the floodplain by broadening the current language in the zoning ordinance regarding the protection of natural/environmentally sensitive areas that is currently included in the AG & AGR districts. Consideration should be given to appropriate density bonuses and more specific language regarding clustering outside of floodplain areas. Permanent conservation easements should be required as a method of protection to receive the bonus.

12. Best Available Study Information.

- a. 100- year floodplain boundary and flood elevation information (existing conditions) developed for watershed master plans should be utilized as the 'best available information' for the purposes of administering the Floodplain Ordinance relative to requirements for proposed subdivisions and building permits.
- b. The stormwater standards should continue to apply to floodprone areas, or "100-year storm limits" that are required to be shown with new subdivision proposals along smaller tributaries. Floodplain standards should not be applied to these areas unless they are shown on the FEMA floodplain maps or have been identified through a watershed master plan. *(See Appendix D for additional information).*
- c. Consideration should be given to regulating based upon a "future conditions" floodplain when the information is available through master planning. However, this topic needs further evaluation and discussion. The benefits of this approach need to be assessed

these three elements may prevent significant increases in flood boundaries in the future.